

IN THE CLAIMS:

Please cancel Claim 14 without prejudice.

Claim 1 (Currently Amended) A process for preparing a hydroperoxide from a hydrocarbon selected from a group consisting ~~essentially~~ of primary hydrocarbons, secondary hydrocarbons and mixtures thereof corresponding to said hydroperoxide which comprises conducting oxidation of said hydrocarbon at a temperature in the range between 130° and 160°C with an oxygen-containing gas in a reaction mixture containing said hydrocarbon and a catalyst comprising a cyclic imide compound and an alkaline metal compound.

Claim 2 (Previously presented) The process according to claim 1 wherein the said cyclic imide compound is the compound of formula (1)

wherein

X is an oxyl radical or a -O-R1 group, wherein R1 is selected from the group consisting of: hydrogen; halogen; hydroxyl; C₁-C₆ alkyl; C₆-C₁₈ aryl; C₃-C₂₀ cycloalkyl; C₁-C₂₀ alkoxy; -CO-R2, wherein R2 is a C₁-C₂₀ hydrocarbonyl group; -O-CO-R3, wherein R3 is a C₁-C₂₀ hydrocarbonyl group or a carboxyl group; or -CO-O-R2, wherein R2 is a C₁-C₂₀ hydrocarbonyl group;

A is -CR4=CR5- or -CR4-CR5-, wherein:

- (i) R4 and R5 are independently selected from the group consisting of: hydrogen; halogen; hydroxyl; C₁-C₆ alkyl; C₆-C₁₈ aryl; C₃-C₂₀ cycloalkyl; C₁-C₂₀ alkoxy; -CO-R2, wherein R2 is a C₁-C₂₀ hydrocarbonyl group; -O-CO-R3, wherein R3 is a C₁-C₂₀ hydrocarbonyl group or a carboxyl group; or -CO-O-R2, wherein R2 is a C₁-C₂₀ hydrocarbonyl group; or
- (ii) R4 and R5 taken together with the carbon atoms to which they are joined form a cyclic group, said cyclic group containing 1 to 8 rings, either fused or linked, said rings being aromatic rings or non-aromatic rings, each ring having 3 to 18 members selected from the group consisting of carbon atoms and heteroatoms, and being optionally substituted with one or more substituents selected from the

group consisting of nitro; phosphine group;
phosphonium group; halogen; hydroxyl; C₁-C₆ alkyl;
C₆-C₁₈ aryl; C₃-C₂₀ cycloalkyl; or C₁-C₂₀ alkoxy.

Claim 3 (Previously presented) The process according to claim 1
wherein said cyclic imide of formula (1) is selected from
the group consisting of N-hydroxyphthalimide,
-hydroxynaphthalimide, -hydroxymaleimide,
-hydroxysuccinimide, and mixtures thereof.

Claim 4 (Canceled)

Claim 5 (Previously presented) The process according to claim 1,
wherein said alkaline metal is selected from the group
formed by lithium, sodium, potassium and cesium.

Claim 6 (Previously presented) The process according to claim 1,
wherein said alkaline metal compound is selected from the
group consisting of oxides, organic acid salts, inorganic
acid salts, halides, alkoxides, oxoacids and their salts,
isopolyacids and their salts, heteropolyacids and their
salts, and mixtures thereof.

Claim 7 (Canceled)

Claim 8 (Canceled)

Claim 9 (Canceled)

Claim 10 (Currently Amended) A process for preparing a hydroperoxide from a hydrocarbon corresponding to said hydroperoxide which comprises conducting oxidation of said hydrocarbon at a temperature in the range between 130° and 160° with an oxygen-containing gas in a reaction mixture containing said hydrocarbon and a catalyst comprising a cyclic imide compound and an alkaline metal compound wherein the amount of said cyclic imide in the reaction mixture ranges from 0.0001 to 1 percent by weight.

Claim 11 (Currently Amended) The process according to Claim 10 wherein the amount of said alkaline metal compound in the reaction mixture ranges from ~~0.000005 to 0.01~~ 0.00001 to 0.005 percent by weight.

Claim 12 (Currently Amended) A process for preparing a hydroperoxide from a hydrocarbon corresponding to said hydroperoxide which comprises conducting oxidation of said hydrocarbon at a temperature in the range between 130°C and 160°C with an oxygen-containing gas in a reaction mixture

containing said hydrocarbon and a catalyst comprising a cyclic imide compound and an alkaline metal compound wherein the amount of said cyclic imide in the reaction mixture ranges from ~~0.0001 to 1~~ 0.001 to 0.5 percent by weight.

Claim 13 (Currently Amended) A process for preparing a hydroperoxide from a hydrocarbon corresponding to said hydroperoxide which comprises conducting oxidation of said hydrocarbon at a temperature in the range between 130° and 160° with an oxygen-containing gas in a reaction mixture containing said hydrocarbon and a catalyst comprising a cyclic imide compound and an alkaline metal compound wherein the amount of said alkaline metal compound in the reaction mixture ranges from 0.000005 to 0.01 percent by weight.

Claim 14 (Canceled)

Claim 15 (Previously presented) The process according to Claim 1 wherein the hydrocarbon is an ~~alralkane~~ alkane.

Claim 16 (Previously presented) The process according to Claim 15 wherein the hydrocarbon is ethylbenzene.

Claim 17 (Previously presented) The process according to Claim 1

wherein the hydrocarbon is a primary hydrocarbon.

Claim 18 (Previously presented) The process according to Claim 1 wherein the hydrocarbon is a secondary hydrocarbon.

Claim 19 (New) A process for preparing a hydroperoxide from a hydrocarbon selected from a group consisting of primary hydrocarbons and mixtures thereof corresponding to said hydroperoxide which comprises conducting oxidation of said hydrocarbon at a temperature in the range between 130° and 160°C with an oxygen-containing gas in a reaction mixture containing said hydrocarbon and a catalyst comprising a cyclic imide compound and an alkaline metal compound.